Pensacola Lighthouse
Pensacola Naval Air Station
Pensacola
Escambia County
Florida

HABS No. FLA-147

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17-PENSA.
6-

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Eastern Office, Division of Design and Construction
143 South Third Street
Philadelphia 6, Pennsylvania

HISTORIC AMERICAN BUILDINGS SURVEY HABS No. FLA-147

PENSACOLA LIGHTHOUSE

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Location: Pensacola Naval Air Station facing south overlooking Pensacola Bay and the Gulf of Mexico: Pensacola, Escambia County, Florida

Present Owner and Occupant: United States Coast Guard

Present Use: Lighthouse

Brief Statement of Significance: This structure was built in 1826. It was bombarded by Union forces during the War Between the States.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: 1826 (1858 per Rose Holland America's Lighthouses)

B. Likely Sources Not Yet Investigated: Records of construction specifications, historical events, drawings, and photographs are in possession of the U. S. Coast Guard.

C. Supplemental Material:

Pensacola lighthouse, one of the most brilliant lights on the coast of the Gulf of Mexico, was constructed in 1826 when the Navy Base (now Pensacola Naval Air Station) was the only one on the Gulf Coast. The conical tower stands on a peninsula directly across from the only entrance into the harbour.

The lens, cut and polished by Henri LePaite in Paris 137 years ago, is still in use. During the day a canvas cover is spread over the glass to protect it from the sun.

The tower serves as a day marker as well as a beacon to ships at night. The lower third of the tower is painted white and can be seen easily against the green trees. The upper two-thirds is painted black and can be seen against the blue sky.

Jeremiah Ingraham was appointed keeper in 1825. He and his family lived in the small brick quarters at the base. Upon his death in 1840, he was succeeded by his wife. For 15 years, Mrs. Ingraham faithfully climbed the steps every two hours to pull up the weights which turned the kerosene lamp.

Light House Board Reports state that "during the rebellion this tower was shot many times by solid shot." The lens had been removed so was not damaged. In 1874 lightening struck the tower and left large holes, and cracks have appeared after hurricanes battered the structure. Always the damage has been repaired.

Prepared by Ula L. Manning date May 1962

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. A masonry complex composed of lighthouse tower and keepers' quarters; tapered round masonry tower capped with metal lens house; original keepers' quarters between tower and present keepers' quarters; out buildings including oil shed and garage.

2. Condition of fabric: Excellent, little modification.

B. Technical Description of Exterior:

1. Overall dimensions: Approx. 75' x 100' including lighthouse tower and 2-story keepers' quarters. Tower 210' above sea level.

2. Foundations:
   a. Light tower: granite foundations, spread footing approx. 40' deep.

   b. Keepers' quarters: brick bearing wall, brick piers under porch.

3. Wall construction:
   a. Lighthouse tower, 10' thick brick bearing wall, common bond, tapers to 3' thick at top. Sheet metal and glass lens house. Painted black and white.

   b. Keepers' quarters, 18" thick brick bearing wall. Painted white. Wood frame appendage.

4. Porches, balconies:
   a. Lighthouse tower: Metal walk ways around lens house and top stair landing level.

   b. Keepers' quarters: Porches at both floors on three sides, screen porch north and west sides of appendage. Square wood columns. Wood railings both floors.

5. Chimneys: Four brick chimneys in end walls of main block with two flues each, round brick arch caps. Two chimneys in rear appendage.

6. Openings:
   a. Doorways and doors:
      (1) Keepers' quarters: two entry doorways. Four panel wood doors, transom.
      (2) Lighthouse: Heavy wood door (plank) in original exterior doorway to original keepers' quarters.

   b. Windows and shutters:
      (1) Keepers' quarters: Windows located only in north and south elevations.
      (2) Lighthouse tower: 6 over 6 light, double-hung windows. Granite lintels; solid wood shutters, two per window in tower, opening outward and secured with bar.

7. Roof:
   a. Shape and covering:
      (1) Lighthouse tower: Conical sheet metal, spherical vent, lightning rod.
      (2) Keepers' quarters: Gable, asphalt shingle, low-pitched hip roof over porch.

   b. Cornice and eaves: Bracketed cornice, boxed eaves on keepers' quarters.

C. Technical Description of Interior:

1. Floor plans:

   a. Keepers' quarters: Duplex, each unit has a first and second floor, entry hall and front stair, and two rooms on second floor. Baths added in front stair halls on second floor. Kitchens in appendages to rear.

   b. Lighthouse: Spiral stair to top stair landing, ladder to lens house.

2. Stairways:

   a. Keepers' quarters: Stairs, one in each unit of the duplex, to second floor, turned newels and balusters.

   b. Circular iron stair in tower connects to second floor of original keepers' quarters, terminates at landing beneath lens house. Modern iron railing replaces hemp rope, eyelets remain.

3. Flooring:

a. Keepers' quarters, wood floors, concrete floors in original keepers' quarters. Hatch in floor to tunnel which leads to Fort Barrancas one half mile to the northeast. Second floor of original keepers' quarters covered with asphalt tile.

b. Lighthouse, concrete floor at ground level, metal floors elsewhere.

4. Wall and ceiling finish:

a. Keepers' quarters: Wall finish wood strips on masonry wall, wood strip ceiling. Original keepers' quarters has corbelled vault brick ceiling in hall.

5. Doorways and doors: Paneled wood doors throughout appear to be original. Heavy plank door into original keepers' quarters.

6. Hardware: Heavy iron strap hinges, pintles, and bolts; cast metal gargoyles (eagle heads) under cornice of lens house roof are exceptionally fine.

7. Special equipment:
   a. Lighting system: 1st order, revolving, flashing 20 second light, 6 second flash; 300,000 candle power, made by Henri LePaite, Paris.

   b. Original brass alarm bell and pulley.

8. Lighting: Modern Electric

9. Heating: Fireplaces in each room of keepers' quarters. Modern space heaters.

D. Site: Complex located on rise, faces south: composed of lighthouse tower, original keepers' quarters, and modern keepers' quarters; oil shed, garage, well; enclosed by a wood picket fence; various brick, concrete, and asphalt walks.

Prepared by F. Blair Reeves
College of Architecture and
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Gainesville, Florida
February, 1962

Addendum to:

Pensacola Lighthouse
San Carlos Road
Pensacola
Escambia County
Florida
as recorded in 1962

HABS No. FL-147

PHOTOGRAPHS

HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Architectural and Engineering Record
National Park Service
Department of the Interior
Washington, D.C. 20243

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HISTORIC AMERICAN BUILDINGS SURVEY

U.S.NAVAL AIR STATION,

PENSACOLA LIGHTHOUSE HABS No. FL-147

Location: San Carlos Road, U.S. Naval Air Station, Pensacola, Escambia, County.

Latitude: 30° 20' 42" Longitude: 87° 18' 42"

Present Owner: United States Coast Guard; Department of Transportation.

Present Use: Lighthouse and guest house.

Significance: The Pensacola Lighthouse, built in 1825 and rebuilt in 1858, has survived with its first-order Fresenel lens through Civil War bombardments and tropical storms. It was the first U.S. lighthouse in Florida.

Part I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: 1825; rebuilt 1858.

2. Architect: Not known.

3. Original and subsequent owners: The Pensacola Lighthouse has been continuously owned by the Federal government. From 1825 to 1852 it was administered by the Fifth Auditor, Treasury Department; from 1852 to 1910 by the Lighthouse Board, a quasi-independent government agency until 1903 when it was put under the Commerce Department; from 1910 to 1939 by the Bureau of Lighthouses, Commerce Department; from 1939 to the present by the U.S. Coast Guard. Until 1967 the Coast Guard was under the Department of the Treasury but in that year it was transferred to the Department of Transportation.

4. Original plans and construction: In 1823 Congress provided for the construction of a lighthouse at the entrsnce of Pensacola Harbor and authorized arrangements to be made for an attendant. Congress appropriated $6,000 for the structure and by 1825 $5,725 had been spent for that purpose. The light was first illuminated that same year. The focal

plane of the light was 80 feet above the sea level.

In 1854 Congress appropriated $25,000 "for rebuilding on a proper site, and elevating and refitting with the most approved illuminating apparatus the lighthouse at Pensacola." Two years later, on August 18, 1856, Congress appropriated an additional $30,000 "for the erection of proper range lights for crossing the bar at the entrance to Pensacola Harbor, and for completing the light authorized at that place August 3, 1854." In 1857, only $2,000 of that amount was spent, but in 1858 $45,988.82 was expended for the purposes designated. The 1857 report of the Lighthouse Board stated: "The first class lighthouse at Pensacola is under construction, and it is expected that it will be completed during the present working season; after the completion of which the beacons authorized, as ranges for crossing the bar and for making a safe anchorage at night, will be erected." In 1859 it was reported that the lighthouse and new set of ranges had been completed and lighted January 1, 1859. The new lighthouse was described as a first-order revolving lightbeam 160 feet above the ground and 210 feet above the sea. It was at this time that the new Fresnel lens was installed. Measurements taken in the summer of 1972 show the beam is actually 150 feet above the benchmark and 191.5 feet above sea level.

5. Alterations and additions: The first reference to extensive repairs to the Pensacola Lighthouse is found in 1848 Light List which indicated that in the previous year the original lighthouse was refitted with a new lantern, plate glass, and that other work was accomplished. The 1854 report of the Lighthouse Board noted that the revolving machinery of the light had been taken apart and cleaned.

   As a result of Civil War damages, Congress, on March 2, 1867, appropriated $20,000 "for repairs and renovations at Pensacola Light Station." Most of this sum was spent in restoring the tower in order to reestablish the lighthouse as a first-class light, and for the new keeper's house. All of which was accomplished by April 1, 1869.

   Lightning struck the tower twice in 1873-74, melting the fixtures of the call-bell, damaging the brick masonry of the covered way between the keeper's quarters and the tower, breaking windows, and other damages. Repairs were made after the first bolt. The second bolt caused almost identical damage and the repairs had to be repeated. A examination showed the lightning rod to be defective, and it was replaced.

   In 1877 the roof of the keeper's house, damaged in a tornado, was replaced by a shingle roof.

The following year, 1878, the Lighthouse Board reported that the effects of Civil War bombardment coupled with several devastating hurricanes had affected the stability of the tower and $5,000 was requested for repairs. After the money was secured the following year, the tower was repointed from top to bottom.

The lighthouse was converted to electricity in 1939. Periodic chipping, painting and other maintenance is constantly required for the lighthouse. Occasionally, however, it becomes necessary to provide a thorough reconditioning. The 1960 rehabilitation is considered typical of the work which has been required at various times throughout the last century. In that year the exterior of the light tower was generally repaired and repainted. The brick surfaces were sandblasted, the mortar joints were cleaned of the loose material and tuck pointed. The metal plates surrounding the upper portion of the tower were removed, rust areas sandblasted and all were given protective coats of paint and replaced. The entire exterior was repainted, the lower third white and the upper two thirds black. By 1965 the lighthouse was fully automated, and the keeper was no longer needed to operate the lighthouse.

B.Historical Context:

The first light of the 1825 Pensacola Lighthouse, the first U.S. lighthouse in Florida, was undoubtedly an Argand lamp invented by Ami Argand in 1781. The lamp, an improvement over earlier lighting systems, had a hollow circular wick and burned with a brightness equivalent to seven candles. The Argand lamp was later used in conjunction with a parabolic reflector, 18 to 20 inches in diameter, which considerably improved illumination. This reflector lamp was used in the United States after Winslow Lewis, an unemployed sea captain, experimented with it and won acceptance of this method of lighting for U.S. lighthouses, which he patented. Lewis used a lens with the lamp and reflector, which ultimately proved unsuccessful. However, he managed to have "his" system installed in all U.S. lighhouses by 1815. In 1822, Augustin Fresnel perfected the lens, named in his honor, which had prisms at the top and bottom to refract the light so that it would come through the lens in a narrow sheet. A powerful magnifying glass was placed at the center of the lens. The result was a bright, narrow sheet of concentrated light.

Unfortunately, Lewis was able to prevent the installation of the Fresnel lens in U.S. lighthouses for many years.

lt was not until 1840 that the first Fresnel lens was placed in a U.S. lighthouse at Navesink Light Station, New Jersey. By 1851 only three U.S. lighthouses were using the Fresnel lens: Navesink; Sankaty Heady Light Station, Nantucket Island, Massachusetts; and Brandywine Lighthouse, on Delaware Bay.

By the time of the Civil War, all U.S. lighthouses were equipped with a Fresnel lens including that of Pensacola.

It is traditionally considered that Henri LaPaite of Paris, France, cut and polished the lens used in the first lighthouse with its Argand lamp. That lamp probably used whale oil, sperm oil, colza or rapeseed oil, or lard oil in that order as fuel. These frequent changes in the pre-Civil War period stemmed from efforts to obtain a plentiful supply of inexpensive fuel, and one which would eliminate constant attention by the keeper.

Some confusion reigned in 1835 when the Mobile Point Light was changed from a fixed to a revolving light by Winslow Lewis. It caused furor among ships' captains and resulted in much criticism of Stephen Pleasonton, Fifth Auditor of the Treasury Department, and the man in charge of the country's lighthouses. lt was impossible for mariners to distinguish between Pensacola, which had long been a revolving light, and the new one at Mobile Point. Pleasonton, nevertheless, approved the actions, despite Lewis' lack of official capacity in the lighthouse service.

In 1838, as a result of dissatisfaction with the nation's lighthouse program, Congress authorized Navy commissioners to inspect the lighthouses to determine their needs and to make recommendations. As a consequence of Captain Lawrence Rousseau's inspection the following observations were made concerning the Pensacola Lighthouse in a report dated October 29, 1838:

> "Pensacola, being our only naval station in the Gulf of Mexico, ought to be so lighted as to enable our cruisers to leave or enter the port at any time by removing the present lighthouse to the height between the old Fort Barrancas and the Oaks; by placing a lighthouse on the west angle of Fort Pickens; and placing a small light-boat on the southwest spit of the Middle Ground. The cost of such operations Captain Rousseau estimated as $8,000 for the Fort Pickens Lighthouse, and $12,000 for the light-bost."

Apparently none of the recommendations made by Captain

Rousseau, who was later Commodore and Commandant of the Pensacola Navy Yard, 1854-56, were carried out.

Thirteen years later, in 1851, Congress launched another investigation of the lighthouses. This time the report on the Pensacola Lighthouse termed the light "deficient in power, being fitted with only ten lamps and sixteen-inch reflectors." It was characterized as "Little better than a harbor light." The new Lighthouse Board felt that "the Pensacola light should be changed and that the port, because it was an important naval station, rated 'a first-class sea coast light.'"

On October 18, 1853, the Commandsnt of the Pensacola Navy Yard wrote to the Collector of the port of Pensacola about improvements at the harbor entrsnce. The lighthouse, he wrote, was well located but was much too low. Tall pines obscured the light in certain directions from ships at sea and he recommended that the tower be raised 20 to 25 feet, or a new one built. The Collector agreed with the Commandant and in his report to the Lighthouse Board endorsed the recommendations and further suggested that new machinery and a more brilliant light be provided. During 1854-58 Congress appropriated $55,000 for elevating, re-fitting and increasing the illumination of the Pensacola lighthouse. Thus, construction of a first-order, revolving light was completed and lighted by January 1, 1859. It was in this new structure that the Fresnel lens was installed.

The new lens also required a new lamp. However, it is not known which of several lamps used with the Fresnel lens was placed in the lighthouse. In 1884 mineral oil (kerosene) was substituted as a fuel. Kerosene was also used when the incandescent oil vapor lamp, similar to the Coleman lantern, replaced the old lamps.

The new lighthouse was up only a few years when the Civil War began. The Confederate occupation of the Navy Yard and Fort Barrancas brought the lighthouse under fire from Union forces at Fort Pickens. A picture of 1861 or early 1862 shows a Rebel mortsr battery entrenched near the lighthouse. Reports indicate that the tower was struck many times by solid shot. Fearful that the lens might be damsged, it was removed and buried in the sand near the tower, though when and by whom, whether Union or Rebel, is not known. In 1863, after the Union forces had reoccupied the area, a report on the lighthouse stated: "the important light at Pensacola has been repaired and re-exhibited, showing temporarily a fouth-order instead of first-order lens, which is alloted to that station, and the placing of which is not deemed advisable until the occupancy of a greater portion of the surrounding country by the United States forces shall have placed the station beyond risk of damage and spoilation."

It was not until 1866 that the Lighthouse Board report noted that "steps have been in progress for the reestablishing of range beacons to mark the entrance into Pensacola. The Caycas range was lighted December 22, 1866, and the Barrancas range on February 4, 1867, the delay being caused by the failure of the respective keepers to report for duty at the proper time, owing to some misunderstandings." Congressional appropriations following the war enabled repairs to be made and a first-order light was exhibited on April 1, 1869. At the same time a new keeper's dwelling was constructed.

In 1852, Congress created a nine-member Lighthouse Board with the Secretary of the Treasury as the ex-officio president of the board, but with Commodore William B. Shubrick as the chairman. According to the law, seven members of the board were from the Army and Navy. An inspector, a naval officer, was placed in charge of each lighthouse district, and this officer inspected the lighthouse in his district every three months. The Pensacola Collector of Customs was retained as Superintendent of Lights, but his duties were primarily fiscal and administrative. In a few years, a district engineer, an army officer, was added. It was his responsibility to supervise the building of new light stations and the repair of old ones. It was the new Lighthouse Board and its field representatives that were responsible for rebuilding the Pensacola Lighthouse in 1858. In 1903, lighthouses were transferred to the Department of Commerce and in 1910 Congress abolished the Lighthouse Board and created the Bureau of Lighthouses which remained a part of the Commerce Department. This reorganization did away with the multi-headed military dominated board and substituted a one-man civilian head of the lighthouse service. Much credit, however, is given to the old Lighthouse Board for materially improving the lighthouses throughout the country in its fifty-eight years of operation.

George R. Putnam served as the head of the Bureau of Lighthouses from 1910 and 1935. Under him and directly in charge of the Pensacola Lighthouse was a civilian district inspector. An officer from the Corps of Engineers was concerned with construction and repair. On July 7, 1939, the Lighthouse Bureau was discontinued and its personnel and equipment were transferred to the U.S. Coast Guard and back to the Department of the Treasury. The Pensacola Lighthouse has been operated and maintained by the Coast Guard since that time, although the Coast Guard in 1967 was transferred from the Treasury to the Department of Transportation.

Nothing has been found to indicate the amount of land in 1825 under the jurisdiction of the Pensacola Lighthouse. In 1888 and 1909 the Secretary of War granted revocable licenses to the Pensacola Lighthouse for the use of certain portions of the nearby Fort Barrancas Military Reservation. In 1927, Executive Order 4739 transferred enough acreage from Fort Barrancas to create a lighthouse reservation of seventy-five acres. In April 1955, 31.5 acres were declared surplus and were transferred to the U.S. Navy which by that time had acquired Fort Barrancas from the Army. This left the Pensacola Lighthouse Reservation with 43.5 acres which it currently maintains.

When the light was converted to electricity in 1939, permission was obtained from the U.S. Army to run power lines over Army land, to use Army power and to pay the Army current electric rates. The conversion was effected on August 30, 1939. The same procedure was reenacted in 1949 when the Navy secured the Army's holdings.

On September 8, 1965, the lighthouse was automated. The light is controlled by sensor switches which turn it on and off at the proper times. In addition, when one light burns out, a second automatically is moved into position. Thus, there is no need for a resident keeper. Today, the lighthouse is maintained by personnel from the U.S. Coast Guard Station on Santa Rosa Island. A trip across the bay is made weekly to inspect the light and provide normal maintenance. The former keepers' quarters are now used for rest and relaxation by Coast Guard and Navy personnel.

Jeremiah Ingraham was appointed the first keeper on December 22, 1824, and served until his death on September 6, 1840. His wife succeeded him and continued in that capacity until January 1855. Joseph Palmer served as the keeper from January 5, 1855, until February 13, 1863, when he was succeeded by Henry B. Estes. Estes stayed on the job until January 3, 1867. There is no indication whether Palmer remained at his post during the Confederate occupation or not. In any event, it is most unlikely that any kind of a light was shown by the Confederates from January 1861 when they took the territory until they evacuated it in May 1862. Robert H. Watts became keeper on January 3, 1867, and served until May 22, 1869. He was succeeded by Benjamin E. Peters who served until October 8, 1869. Thomas C. Madden was keeper for two months, or until December 8, 1869. Patrick Williams O'Neill, who was appointed February 17, 1870, was in office until May 10, 1870. William A. Mills followed him and kept the light until May 5, 1871. Then came Stephen I. Jarvis who was the incumbent until January 24, 1872. His successor was John Robinson, who was the keeper until April 4, 1873. Then Charles J. Moberly

was acting keeper from October 14, 1873 until July 28, 1874. Richard Morris became acting keeper on July 28, 1874, and served until June 4, 1875, when Richard Riggs succeeded him as acting keeper, holding office until May 26, 1877, and remaining until October 30, 1885. Mr. Samuel Lawrence was appointed keeper in 1878. During Lawrence's service, on January 21, 1884, Tennessee Avanda Lawrence was the first child known to have heen born in the keeper's house. Her mother was the former Martha Enfinger of Pensacola. William A. Bethel became keeper on April 2, 1886, but remained on the job only until June 14 of that year. He was succeeded by George T. Clifford who had an unprecedented 30 years 9 months and 17 days service as keeper. He resigned April 1, 1917.

Records were not available for this survey to provide detailed information on the keepers who have been asaigned to the Pensacola Lighthouse since 1917, when Clifford retired. Three names appear during the years between 1917 and 1932: Mr. Thompson, Mr. Doyle and George Darby. In 1932, Mr. J. M. Hatten, Sr., succeeded Darby and remained in that position until he retired in 1953. In 1939 when the Coast Guard took over the lighthouses, civilians were given the option of donning a uniform or of remaining in the Civil Service. Mr. Hatten chose the latter. Hatten was the last civilian keeper to man the tower. Since that time the tower has been maintained by the Coast Guard personnel.

The keeper's family normally lived in the house at the base of the tower. An exception occurred during World War II, when they were forced to move out and to make room for an enlarged team of Coast Guard personnel. The added force was needed to perform beach surveillance and to provide a guard for the tower. During the war, the wattage of the bulb was decreased for obvious reasons. Mr. Hatten and his family moved back into the keeper's house in 1945. By 1952 the house had been divided into aeveral apartments and two members of the three-man team assisting Mr. Hatten lived in the apartments with their families.

The list of keepers during these years is complete, but who supervised the keepers and what was the adminiatrative organization of the country's lighthouses? From its erection in 1825 until 1852, the Penaacola Lighthouse was under the jurisdiction of Stephen Pleasonton, Fifth Auditor of the Treaaury Department. Pleasonton was popularly known aa the General Superintendent of Lighthouaes. Directly reaponsible for the Pensacola Lighthouse was the Collector of Customs for the port of Penaacola, called the Superintendent of Lights. During those years, supervision of the nation's lighhouses was more noted for its economy than its efficiency. During

the same period Pensacola's light received its share of criticism as already noted.

Prepared by: Dr. William S. Coker
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Historic American Buildings Surveys
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PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The single story, first keeper's quarters is flanked by tapered shaft of the lighthouse with its storage building at its base and the two-story, five-bay keeper's house which has two-story porches at the front and side elevations.

2. Condition of fabric: The structure is in good condition, resulting from 1960 renovations. However, the interior of the single-story keeper's quarters is in deteriorating condition.

B. Description of Exterior:

1. Overall dimensions: The outside diameter of the tower at the base measures 28'. It is 166 feet high, with the top of the tower vent being 205 feet above sea level. The attached storage building is approximately 20' x 22'. The first keeper's quarters is 24' -8" x 42' -8" with a screened porch 13' -9" wide across the front. The two-story keeper's house measures 27' -8" x 46' -6" with its porches extending 6'-6".

2. Foundations: The lighthouse foundation and that of the storage building is dressed granite. Rough cut granite blocks approximately 24" x 36" extend outward and downward to form a spread footing for the tower. According to an 1870 Lighthouse Board drawing, the footing extends 8'-0" below grade with a diameter of 40'-0" at the bottom resting on an additional 3'-0" of beton (concrete).

   Keeper's quarters: The one-story frame keeper's quarters is on brick piers 8-1/2" x 12", painted white, spaced approximately 7'-6" on center, and supporting the span of the 1-1/2" x 5-1/2" floor joists, spaced 24" on center. The two-story brick keeper's house has common bond brick walls painted white and 13" square brick piers that support 2-3/4" x 5-3/4" members that tie into the foundation wall. These members support 2-3/4" x 4" joists for the porch.

3. Walls: In order to be visible from the sea, the bottom third of the brick tower, with walls 10'-0" thick at the base, is painted white for contrast against the tree canopy, while the top two-thirds which tapers to 3'-0" in thickness is painted black for contrast against the sky. The lens house is of

sheet metal, painted black, and is glazed. The brick storage building walls at the exterior and the interior are brick painted white.

The one-story keeper's quarters' exterior walls have 4-1/2" horizontal board siding, painted white. The two-story keeper's house has white painted brick walls, 18" thick.

4. Porches, balconies: The lighthouse tower has a 36" wide heavy plate metal walkway around its circumference at the top. A cast-iron railing 43-3/4" high has 16-1/4" diameter posts that receive a 3-1/2" diameter cast-iron ball. Each is die stamped with a number from 1 to 16 which corresponds to the 16 points on the compass to aid the observer on the walkway for direction orientation. A top and bottom rail support 1" diameter balusters 7" on center.

The one-story keeper's quarters has a screen porch on the west elevation with 3-1/2" board flooring and 2-1/2" beaded board ceiling. The porch has a flight of unpainted wooden steps, with a 1-1/2" diameter, iron pipe hand railing, painted black.

Porches on the two-story keepers house have wood balustrades 31" high, with 1-1/2" square balusters and 4" on center, which tie into the 3-3/4" wood columns, chamfered above the hand rail and spaced 8'-5" apart. A flight of wooden steps, 12'-0" wide, leads to the first-floor porch on the south elevation.

5. Chimneys: There are no chimneys on the storage building, although the 1870 drawings indicate that one did exist at the northeast corner.

Two brick chimneys exist on the one-story keeper's quarters; one on the north roof slope has a two-course corbeled cap with a single chimney pot at the flue. The two-story keeper's house has four chimneys: two are located on each gable end wall. Each has a cap with a single-course corbel supporting a two-course corbel, which in turn supports a brick cowl, divided to accommodate two flues.

6. Openings:

   a. Doorways and doors: On the west elevation of the lighthouse storage building exists the original entrance to the lighthouse, which is enclosed by the one-story keeper's quarters. The existing door has 2" x 6" diagonal boards at

the exterior with 2" x 6" vertical boards at the interior which enclose a four-light transom. Hinged with three heavy iron strap hinges, the door is secured on the inside with two sliding bolt latches.

On the north elevation of the storage building, a doorway with a modern steel door provides access to work rooms on the first floor.

A steel plate door in the lens house opens to the outside walkway at the top of the tower.

The one-story keeper's quarters' doorways are hung with panel doors. The door on the west porch has a three-light transom.

The two first floors doorways at the south facade of the two-story keeper's house have four-panel doors with four-light transoms, while the two doorways opening onto the second-floor porch, also on that facade, have four lights over two panels.

b. Windows and shutters: Five windows at different heights in the lighthouse tower face various directions on the tower's circumference. The four lower ones have double-hung sash with six-over-six lights, and the window nearest the top has six-over-three lights.

All have brick sills, granite lintels, and solid wood shutters, two per window, which open outward and are secured on the inside with a wooden lock bar. At the first floor, north wall of the storage building, there are modern six-over-one-light sash in the window openings. The 1870 drawing indicates a 3'-0" wide window on the south elevation which is closed with concrete block. At the second floor of the storage building, now converted into a small apartment, six-over-six-light, double-hung wood sash are in the north and west openings. Six-over-one-light, double-hung wood sash are located in the south opening.

The window openings of the one-story keeper's quarters have double-hung, six-over-six-light sash with plain, unmolded sills. A large opening in the west gable of this structure is presently covered over with tin sheeting.

Window openings are located only on the north and south elevations of the two-story keeper's

house. All have double-hung, six-over-six-light sash. The second-floor windows have granite lintels. A louvered opening in either the east or the west gable of this structure provides ventilation for the attic.

7. Roof:

a. Shape, covering: The lena house of the tower has a dome-shaped roof covered with sheet metal. A spherical vent, 2'-6" in diameter (measured from the 1870 drawing), contains a lightning rod.

The roof on the storage building and both the keeper's quarters have gable roofs covered with diamond-shaped slate shingles, terra cotta in color.

b. Cornice, eaves: The storage building and the one-story keeper's quarters have boxed eaves with galvanized metal gutters and downspouts.

Eaves on the two-story keeper's house have a cornice with a cyma recta crown molding with double, wood scroll brackets, spaced approximately 2'-6" apart, supporting the soffit. The bracketed cornice continues up the rakes.

C. Description of Interior:

1. Floor plans: The lighthouse tower contains a 10'-0" diameter stairway shaft that leads to a landing immediately below the lens house. From this landing a stairway rises to the lens house. Access to the stairway on the first floor is through a central hallway of the storage building flanked on either side by two narrow rooms. Access to the second-floor apartment is from the tower stairway through a corbeled brick vault built into the space between the inner and outer walls of the tower. The apartment contains two rooms including a living-sleeping room with a closet space and a bathroom with a shower stall.

The one-story keeper's quarters has two doors off the west screened porch; one leading to the bathroom and the other leading to a kitchen area. Both of these rooms have access to a narrow room extending north-south which contains the entrance to the work-storage building. Just east of this room is another small room having an east porch which has a doorway to the two-story keeper's house.

The two-story keeper's house is a duplex plan. Each unit has an entry hall with a stairway to two bedrooms on the second floor. Bathrooms have been added in front stairhalls on the second floor. Kitchens exist in appendages to the rear on the first floor which has double rooms opening into each hallway.

2. Stairways: A cast-iron spiral stairway rises 127' up the 10'-0" inside diameter of the lighthouse tower to the landing beneath the lens house. An intricate open scroll work is cast into the treads and risers. A similar cast-iron stairway extends from the landing to the lens house. A modern iron band railing replaces hemp rope, of which the wooden eyelets still remain.

   Wooden stairways in the two-story keeper's house duplexes have turned newels and balusters.

3. Flooring: Floors in the lighthouse and the first floor of the storage building are concrete. The second-floor apartment of the storage building, as well as the floor of the one-story keeper's quarters are covered in vinyl tile.

   Wood floors exist in the two-story keeper's house.

4. Wall and ceiling finish: A 2'-6" brick vault which has a cement wash painted white is carried on 7'-9" high brick walling, also white, in the central hall of the storage building. Both adjoining rooms on the first floor are treated the same. The apartment on the second floor has a fiberboard suspended ceiling and modern wood paneling on the walls. Original ceiling and walls were covered with beaded board.

   Walls and ceilings of the one-story keeper's quarters were of beaded board. The two-story keeper's house has plastered walls and ceilings.

5. Doorways and doors: Doorways in the apartment of the storage building have modern hollow core doors.

   Interior doorways in the keeper's quarters have four-panel, stile and rail doors of mortise and tenon construction.

6. Decorative features and trim: Below the cornice of the lens house, cast metal gargoyles (eagle heads), painted black, carry rain water off the roof.

7. Mechanical equipment:

a. Heating: Fireplaces in each room of the two-story keeper's house are supplemented with electric space heaters.

b. Lighting: All lighting is modern incandescent.

c. Special equipment: Employing the Fresnel lens, the lighting system is a first-order, electric, revolving twenty-second light with a six-second flash of 400,000 candle power visible for twenty miles at sea. An emergency standby diesel generator is located in the north, first-floor room of the storage building.

D. Site:

1. General setting and orientation: The lighthouse complex, about one-half acre in size and consisting of the lighthouse tower, the one-story keeper's quarters, and the two-story keeper's house (converted into duplex apartments for recreational use by Navy personnel) faces south towards Pensacola Bay. The lighthouse reservation, operated and maintained by the U.S. Coast Guard, is entirely within the perimeter limits of the U.S. Naval Station. The building complex is located in the 43-1/2 acre reservation, which is mostly wooded with live oak and pine. San Carlos Road runs along the north property line with Bateria de San Antoine and Fort Barrancas sited about three-quarters of a mile from the lighthouse entrance road.

2. Historic landscape design: A wood picket fence is built entirely around the lighthouse complex. Pickets are 3/4" x 2¼" x 4' on 3" x 4" stringers which are attached to 5½" square posts 8'-10" on center. A 1" x 12" with a 3/4" x 2¼" cap is attached to the bottom of the posts and extends the entire length of the fence.

A brick sidewalk, 4"-4" wide, extends along the outside of the fence on the south side and part of the west side.

Concrete sidewalks, 3'-0" wide, exist around the house within the fence area and connect with gates in the fence and to the oil shed in the northeast oorner of the enclosure.

3. Outbuildings: The brick oil storage shed measures approximately 11'-6" x 13'-6". On the north side of the shed is attached a wooden paint storage lean-to structure, 8'-1" x 13'-6", with 5" horizontal board siding and a four-panel door. Both the lean-to and the brick shed have a corrugated metal roof.

Outside the fenced area and to the west are two wooden structures. One is the well pump house with 5" horizontal board siding and an asbestos tile roof. It has a 3'-6" wide, vertical board door on the south elevation and a six-over-six light wood sash at the north elevation. The other building is a 21'-7" x 26'-6" garage with board and batten siding and a wood shingle roof. The battens are 1" x 3" and the boards are 12" wide. Three pairs of outswinging doors are on the south elevation. Each is 3'-10" wide. A 3'-5" wide door constructed of 3¼" beaded boards is at the north elevation. A marine range marker beacon light is inside the picket fence near the southeast corner of the two-story keeper's house and interrupts the sidewalk which extends around the house.

Prepared by: John A. Sanderson
Project Supervisor
Historic American Buildings Survey
August 1972

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings:

Measured drawings of the lighthouse can be found in the Civil Engineering Office, 8th U.S. Coast Guard District Office, Customs House, New Orleans, Louisiana.

Five copies of old 19th century drawings of the lighthouse are available in the HABS Field Records.

B. Early Views:

The two oldest views of the lighthouse are from Records Group 77 (Naval Observatory), National Archives, Washington, D.C. Both were taken from a distance and the structure is not shown in any particular detail. (1) View showing Confederate batteries at Fort Barrancas taken about 1861, with lighthouse in the background, Photo No. 77-HL-99-1; (2) View showing Confederate mortar battery with lighthouse in the background taken about 1861, Photo No. 88-HL-99-2. The proximity of the Rebel gun emplacement to the lighthouse may explain the shelling of the light tower by Union guns. (3) There are seven views of the interior and exterior of the lighthouse taken in 1952, published in the November 7, 1952, issue of the Gosport, NAS Pensacola, Florida, station newspaper. A copy is in the NAS Library and in the Aids to Navigation Section, 8th Coast Guard District, New Orleans, Louisiana; (4) Two 1964 aerial views, one taken from the Bay toward land and one taken almost directly over the tower, in the 8th U.S. Coast Guard District Office, Customs House, New Orleans Louisiana.

C. Bibliography:

1. Primary and unpublished sources:

New Orleans, La. Civil Engineering Office, 8th U.S. Coast Guard District Office, Customs House. Correspondence file.

Santa Rosa Island, Florida. "History of Pensacola Lighthouse, Florida." This unsigned history proved to be of great value in the writing of this brief history. It was frequently quoted and closely paraphrased.

2. Secondary and unpublished sources:

Holland, Francis Ross, Jr. America's Lighthouses: Their Illustrated History Since 1716. Brattleboro, Vermont: The Stephen Green Press, 1972.

Gosport. "Pensacola's Guilding Light...The Light that Never Fails. "Vol. XI, No. 3, p.2. Pensacola: U.S. Naval Air Station, November 7, 1952.

Brown, Dot. "For All to See." The Pensacola News Journal. August 20, 1972, Section E, pp. 1,7.

PART IV. PROJECT INFORMTION

The project was undertaken by the Historic American Buildings Survey (HABS) under joint sponsorship of the National Park Service, The American Revolution Bicentennial Commission of Florida, and the Historic Pensacola Preservation Board. Measured and drawn during the summer of 1972 under the direction of John Poppeliers, chief of HABS, by: Rodd L. Wheaton (Architect, HABS), June Project Supervisor; John A. Sanderson (University of Florida), July-August Project Supervisor; Dr. William S. Coker (University of West Florida), Historian; John M. Szubski (Princeton University), Architect; and by Student Assistant Architects: J. Tucker Bishop (University of Texas, Austin); John C. Hecker (University of Illinois, Urbana) and Scott A. Kinzy (University of Nebraska) at the United States Naval Air Station, Pensacola, Florida. Susan McCown, a HABS staff historian in the Washington, D.C. office, edited the written descriptive and architectural data in the fall of 1980. Jack Boucher, a HABS staff photographer, took the documentary photographs in March of 1974.

ADDENDUM TO:
PENSACOLA LIGHTHOUSE
San Carlos Road
Pensacola
Escambia County
Florida

HABS No. FL-147

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